REMARKS

Claims 1, 4-13, 15, 17-18, 20, 22-33, and 35-96 were presented for examination. Claims 1, 4-13, 15, 17, 20, 22-33, 35-40, 42-58, 60-65, 67-76, 78-80, 82, 84, 85, 87, 88, 90, 92, 93, 94 and 96 were rejected. Claims 18, 41, 59, 66, 77, 81, 83, 86, 89, 91 and 94 have been objected to as allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 84, 87, 90, 92 and 94 are hereby amended. Upon entry of the present amendment, claims 1, 4-13, 15-18, 20, 22-33 and 35-96 will be presently pending in this application, of which claims 1, 12, 13, 22, 37 and 46 are independent. Applicants submit that claims 1, 4-8, 11-13, 16, 20, 22-33, 35-96 are in condition for allowance.

Applicants are separately submitting a Second Supplemental Information Disclosure Statement today via first class mail and attach to this paper a courtesy copy of the Second Supplemental Information Disclosure Statement and PTO Form SB/08 for the Examiner's convenience.

The following comments address all stated grounds of rejection. The Applicants respectfully traverse all rejections and urge the Examiner to pass the claims to allowance in view of the remarks set forth below.

Amendment to the Specification

In the current amendment to the specification, the last sentence of the first paragraph on page 7 of the application (page 7, lines 13-16) has been amended to correct a clerical error. Specifically, the term "Remote Display Protocol (RDP)" was changed to correctly reference the "Remote Desktop Protocol (RDP)" developed by Microsoft Corporation of Redmond, Washington. It is well known by one ordinarily skilled in the art that the remote display protocol

provided by Microsoft is known as the Remote Desktop Protocol (RDP), and that RDP stands for

the Remote Desktop Protocol. No new matter has been introduced.

Claim Amendments

In the current listing of claims, claims 84, 87, 90, 92 and 94 have been amended to

correct a ministerial error. Specifically, these claims have been amended to indicate that the

remote display protocol is the Remote Desktop Protocol. As discussed above, it is well known

by one ordinarily skilled in the art that the remote display protocol provided by Microsoft is the

Remote Desktop Protocol (RDP) and that RDP stands for Remote Desktop Protocol. Support for

the amended claims can be found on page 7, lines 13-16; and throughout the remainder of the

specification. No new matter has been introduced. Applicants submit that the presently pending

claims are in condition for allowance.

CLAIM REJECTIONS UNDER 35 U.S.C. §102

A. Claims 1, 4-7, 11, 13, 17, 20, 71-75, 82 and 88 Rejected Under 35 U.S.C. §102

Claims 1, 4-7, 11, 13, 17, 20, 71-75, 82 and 88 are rejected under 35 U.S.C. §102(b) as

anticipated by Krajewski, Jr. et al. (U.S. Patent No. 5,590,199) ("Krajewski"). Claims 1 and 13

are independent claims. Claims 4-7, 11 and 88 are dependent on and incorporate the patentable

subject matter of claim 1. Claims 17, 20, 71-75 and 88 are dependent on and incorporate the

patentable subject matter of independent claim 13. Applicants respectfully traverse this rejection

and submit that Krajewski fails to disclose each and every element recited in claims 1, 4-7, 11,

13, 17, 20, 71-75, 82 and 88.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Each of the independent claims 1 and 13 are directed towards a method for receiving *a request to execute an application program on an application server on behalf of a client,* and *transmitting encrypted output from execution of the application program over an application communication channel to the client.* Krajewski does <u>not</u> disclose receiving *a request to execute an application program on an application server on behalf of a client,* and *transmitting encrypted output from execution of the application program over an application communication channel to the client.*

Krajewski describes an apparatus and methods for using a smart card to store an encrypted user session key to authenticate users to a network service in conjunction with a Kerberos authorization system ("KAS"). In Krajewski, a client requests from a ticket service a server ticket for accessing a service on the network, and then presents the server ticket and an associated authenticator to the service to gain access (see Krajewski, column 6, lines 11-15 and lines 26-29). The smart card of Krajewski is used for decrypting and encrypting messages from KAS and a ticket granting service ("TGS") to authenticate a user to provide authentication (see Krajewski, column 7, lines 53-55; column 8, lines 16-49 and lines 62-67). The smart card provides services to a Kerberos client to encrypt Kerberos authenticators and to decrypt KAS/TGS authentication responses. Krajewski specifically discloses that the smart card does <u>not</u> act as an encryptor for message data streams (see Krajewski, column 8 lines 51-52). As such, Krajewski does <u>not</u> discuss encrypting and decrypting the transmission of output of an application running on an application server to display remotely on a client. As such and in contrast to the claimed invention, Krajewski does <u>not</u> disclose receiving a *request to execute an*

application program on behalf of a client, and *transmitting encrypted output from execution of the application program over an application communication channel to the client.*

Because Krajewski fails to disclose receiving *a request to execute an application program on an application server on behalf of a client,* and *transmitting encrypted output from execution of the application program over an application communication channel to the client,* Applicants respectfully request the reconsideration and withdrawal of the rejection of claims 1, 4-7, 11, 13, 17, 20, 71-75, 82 and 88 under 35 U.S.C. §102.

CLAIM REJECTIONS UNDER 35 U.S.C. §103

A. Claims Rejected Under 35 U.S.C. §103

Claims 12, 22-27, 29-33, 35-40, 46-50, 52-57, 64, 65, 68, 84, 85, 87, 90, 93 and 96 are rejected under 35 U.S.C. §103 as unpatentable over Krajewski in view of Anderson et al. (U.S. Patent No. 6,108,787) ("Anderson"). Claims 12, 22, 37, and 46 are independent claims. Claims 64, 65, 68, 85, and 86 are dependent on and incorporate the patentable subject manner of claim 12. Claims 23-27, 29-33, and 35-36 are dependent on and incorporate the patentable subject matter of claim 22. Claims 38-40 and 93 are dependent on and incorporate the patentable subject matter of independent claim 37. Claims 47-50, 52-57, and 96 are dependent on and incorporate the patentable subject matter of independent claim 46. Applicants respectfully traverse this rejection and submit that Krajewski in view of Anderson fails to teach or suggest each and every element recited in claims 12, 22-27, 29-33, 35-40, 46-50, 52-57, 64, 65, 68, 84, 85, 87, 90, 93 and 96.

I. Independent Claims 12, 22, 37, and 46 Rejected Under 35 U.S.C. §103

To establish *prima facie* obviousness of a claimed invention, all the claim limitations

must be taught or suggested by the prior art. Krajewski in view of Anderson does not teach or

suggest receiving *a request to execute an application program on an application server on*

behalf of a client, and *transmitting encrypted output from execution of the application program*

over an application communication channel to the client via a remote display protocol.

As discussed above, Krajewski does not disclose receiving *a request to execute an*

application program on an application server on behalf of a client, and *transmitting encrypted*

output from execution of the application program over an application communication channel to

the client. Krajewski is focused on providing encryption of Kerberos authenticators and

decryption of KAS/TGS authentication responses to a Kerberos client.   As such, Krajewski does

not teach or suggest encrypting and decrypting the transmission of output of an application

running on an application server to display remotely on a client. Anderson fails to bridge the

factual deficiencies of Krajewski. The Examiner cites Anderson only to suggest one ordinarily

skilled in the art might modify Krajewski to use a remote display protocol. Anderson does not

teach or suggest *transmitting encrypted output from execution of the application program over*

an application communication channel to the client via a remote display protocol. In contrast to

the claimed invention, Anderson teaches away from using encryption and avoids cryptographic

entities by using a different approach (see Anderson, column 2, lines 19-20). Anderson uses an

information switch (20, Figure 3) rather than encryption facilities to transmit data from a lower

classification system (10, Figure 3) to a higher classification system (20, Figure 3). Therefore,

Krajewski in view of Anderson fails to teach or suggest receiving *a request to execute an*

application program on an application server on behalf of a client, and *transmitting encrypted*

*output from execution of the application program over an application communication channel to
the client via a remote display protocol.*

Moreover, there is <u>no</u> motivation to combine the reference of Krajewski with the
reference of Anderson to teach or suggest modifying Krajewski to use the remote display
protocol of Anderson. The motivation to combine must come from within Krajewski. As
Krajewski is focused on using a smart card with a Kerberos client for authentication, nowhere in
Krajewski does it teach or suggest the remote displaying of output of executing an application
that may require a remote display protocol. Rather, Krajewski teaches away from using the
smart card for encrypting and decrypting bulk message data streams such as those that may occur
in applying the remote display protocol of Anderson (see Krajewski, column 8, lines 50-53).
Bulk message data streams would require more memory space on the smart card and would
decrease the performance of encryption rates. As such, there is no motivation to combine the
references. Therefore, it was <u>not</u> obvious to one ordinarily skilled in the art, at the time the
claimed invention was made, to modify Krajewski to use the remote display protocol discussed
in Anderson.

Because Krajewski in view of Anderson fails to disclose, teach, or suggest receiving a
request to execute an application program on an application server on behalf of a client, and to
*transmit encrypted output from execution of the application program over an application
communication channel to the client,* Applicants submit that claims 12, 22-27, 29-33, 35-40, 46-
50, 52-57, 64, 65, 68, 84, 85, 87, 90, 93 and 96 are patentable and in condition for allowance.
Applicants therefore request the withdrawal of the Examiner's rejection of claims 2, 22-27, 29-
33, 35-40, 46-50, 52-57, 64, 65, 68, 84, 85, 87, 90, 93 and 96 under 35 U.S.C. §103.

B. Patentability of Claims Dependent on Independent Claims

Claims 8 and 76, are rejected under 35 U.S.C. §103 as unpatentable over Krajewski in

view of Johnson et al (US 5,560,008) ("Johnson"). Claims 9, 10, 78, and 79 are rejected under

35 U.S.C. §103 as unpatentable over Krajewski in view of Davis (US 5,818,939) ("Davis").

Claims 15 and 80 are rejected under 35 U.S.C. §103 as unpatentable over Krajewski in view of

Gifford (US 6,049,785) ("Gifford"). Claims 28 and 51 are rejected under 35 U.S.C. §103 as

unpatentable over Krajewski in view of Anderson and in further view of Johnson et al. (US

5,560,008) ("Johnson"). Claims 42, 63, and 67 are rejected under 35 U.S.C. §103 as

unpatentable over Krajewski in view of Anderson and in further view of Baskey et al. (US

6,049,785) ("Baskey"). Claims 43 and 60 are rejected under 35 U.S.C. §103 as unpatentable

over Krajewski in view of Anderson and in view of Gifford. Claims 44, 45, 61, 62, 69, and 70

are rejected under 35 U.S.C. §103 as unpatentable over Krajewski in view of Anderson and in

further view of Davis. Claims 92 and 95 are rejected under 35 U.S.C. §103 as being

unpatentable over Krajewski in view of Anderson and in further view of Anderson. Claims 8, 9,

and 10 are dependent on and incorporate the patentable subject matter of independent claim 1.

Claims 67, 69, and 70 are dependent on and incorporate the patentable subject matter of

independent claim 12. Claims 15, 76, 78, and 79 are dependent on and incorporate the

patentable subject matter of independent claim 13. Claim 28 is dependent on and incorporates

the patentable subject matter of independent claim 22. Claims 42-45 and 92 are dependent on

and incorporate the patentable subject matter of independent claim 37. Claims 51, 60-63, and 95

are dependent on and incorporate the patentable subject matter of independent claim 46.

Applicants respectfully traverse this rejection and submit that Krajewski in view of Anderson,

Johnson, Davis, Gifford, and Baskey fails to teach or suggest each and every limitation recited in claims 9, 10, 15, 28, 42, 43, 44, 45, 51, 60, 61, 62, 63, 67, 69, 70, 78, 79, 80, 92 and 95.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. As discussed above, Krajewski does not disclose, teach, or suggest receiving *a request to execute an application program on an application server on behalf of a client,* and *transmitting encrypted output from execution of the application program over an application communication channel to the client via a remote display protocol,.* Furthermore, none of the cited references disclose, teach, or suggest receiving *a request to execute an application program on an application server on behalf of a client,* and *transmitting encrypted output from execution of the application program over an application communication channel to the client via a remote display protocol.* Gifford is used only to suggest one of ordinarily skill in the art might modify Krajewski so that an identifier that is a nonce. Johnson is used merely to suggest one of ordinarily skill in the art might modify Krajewski so that the web server validates the identifier when the identifier is received by the web server within a predetermined time frame. Baskey is used to suggest one of ordinarily skill in the art might modify Krajewski so that secure socket layer technology is used to establish the secure web communication channel. Davis is used only to suggest one of ordinarily skill in the art might modify Krajewski so that the session key is equivalent to a null value. Anderson is used merely to suggest one of ordinarily skill in the art might modify Krajewski so that the remote display protocol is the Remote Display Protocol. As such, none of the cited references, singularly or in combination with Krajewski disclose, teach, or suggest receiving *a request to execute an application program on an application server on behalf of a client,* and *transmitting encrypted*

output from execution of the application program over an application communication channel to

the client via a remote display protocol.

Because Krajewski in view of Anderson, Johnson, Davis, Gifford, and Baskey fails to

disclose, teach, or suggest receiving *a request to execute an application program on an*

application server on behalf of a client, and *transmitting encrypted output from execution of the*

application program over an application communication channel to the client via a remote

display protocol, Applicants submit that claims 9, 10, 15, 28, 42, 43, 44, 45, 51, 60, 61, 62, 63,

67, 69, 70, 78, 79, 80, 92 and 95 are patentable and in condition for allowance. Applicants

therefore request the withdrawal of the Examiner's rejection of claims 9, 10, 15, 28, 42, 43, 44,

45, 51, 60, 61, 62, 63, 67, 69, 70, 78, 79, 80, 92 and 95 under 35 U.S.C. §103.

CONCLUSION

In light of the aforementioned arguments, Applicants contend that each of the Examiners rejections has been adequately addressed and all of the pending claims are in condition for allowance. Accordingly, Applicants respectfully request reconsideration, withdrawal of all grounds of rejection, and allowance of all of the pending claims.

Should the Examiner feel that a telephone conference with Applicants' attorney would expedite prosecution of this application, the Examiner is urged to contact the Applicants' attorney at the telephone number identified below.

Respectfully submitted,

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